

IN THE CLAIMS:

Please cancel Claims 1 to 59 without prejudice or disclaimer of subject matter. Please add new Claims 60 to 72 as shown below. The claims, as pending in the subject application, read as follows:

1 to 59. (Cancelled)

60. (New) A processing apparatus comprising:

a chamber accommodating a processing portion;

an exhaust gas line, connected to said chamber, for exhausting ambient gas in said chamber;

a vacuum pump, connected to said exhaust has line, for compressing the ambient gas;

a supply line for supplying the compressed ambient gas into said chamber;

a high pressure gas supply line branched out of said supply line; and

a compressor, provided in said high pressure gas supply line, for further compressing the ambient gas compressed by said vacuum pump.

61. (New) The apparatus according to Claim 60, further comprising a stage provided in said chamber, and a hydrostatic bearing for movably guiding said stage, wherein said high pressure gas supply line supplies the ambient gas to said hydrostatic bearing.

62. (New) The apparatus according to Claim 60, further comprising a pressure sensor for detecting a pressure in said chamber, and a controller for controlling a pressure in said chamber on the basis of an output of said pressure sensor.

63. (New) An exposure apparatus comprising a processing apparatus as defined in Claim 60, a stage for positioning a substrate to be exposed in said processing apparatus, and a laser interferometer for detecting a position of said stage.

64. (New) A device manufacturing method comprising a step of applying a photosensitive material on a substrate, and a step of exposing a substrate by the apparatus as defined in Claim 63, and a step of developing the substrate thus exposed.

65. (New) A processing apparatus comprising:

a chamber;

an exhaust gas line, connected with said chamber, for exhausting a gas from said chamber;

a gas supply line, connected with said chamber, for supplying an ambient gas having a first pressure into said chamber; and

a high pressure gas supply line, connected with said chamber, for supplying an ambient gas having a second pressure higher than the first pressure into said chamber.

66. (New) An apparatus according to Claim 65, further comprising a pressure control device for maintaining a pressure in said chamber at a substantially constant level.

67. (New) An apparatus according to Claim 65, wherein said exhaust gas line is connected with said high pressure gas supply line.

68. (New) An apparatus according to Claim 65, wherein said exhaust gas line is connected with said high pressure gas supply line.

69. (New) An apparatus according to Claim 65, wherein the ambient gas is helium gas.

70. (New) An exposure apparatus comprising:
an apparatus as defined in Claim 65,
wherein a substrate is exposed to light in said chamber.

71. (New) An apparatus according to Claim 70, wherein the light is x-ray.

72. (New) A device manufacturing method comprising:
a step of exposing a substrate to light using an apparatus as defined in Claim 70; and

a step of developing the substrate having been exposed to the light by said exposing step.